19

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

Post-it® Fax Note 7671	Date 11/29	# of pages 12
To Dana Viola	From grace S.	
Co./Dept.	Co. HDOH	
Phone #	Phone # 586-4235	
Fax # x 586/239	Fax #	

November 17, 2004

Ms. Grace Simmons
State of Hawaii Department of Health
Solid and Hazardous Waste Branch
919 Ala Moana Boulevard, Room 212
Honolulu, Hawaii 96814

RE: Response to your Request for Guidance on Conducting a Waste Determination for Listed Hazardous Waste K050

Dear Ms. Simmons:

This letter responds to your request for guidance in conducting a waste determination of listed hazardous waste K050. Specifically, you had asked when a material first comes within the listing description for K050 listed hazardous waste.

Listed hazardous waste K050 is defined in 40 CFR 261.32 as "Heat exchanger bundle cleaning sludge from the petroleum refining industry". EPA listed this waste based upon it's potential to leach hexavalent chromium that could pose a threat to human health or the environment if not properly managed.

You had asked *when* sludge generated within a heat exchanger unit at a petroleum refinery would first meet this description. For example, would the sludge be considered "generated" and therefore subject to the listing when the internal bundle containing the sludge is removed from the heat exchanger unit but prior to the sludge being removed from the bundle?

EPA, to my knowledge, never directly or specifically answered this question based upon an examination of the following EPA background documents:

- Background Document, Resource Conservation and Recovery Act, Subtitle C- Identification and Listing of Hazardous Waste, §§261.31 and

261.32 - Listing of Hazardous Wastes, May 2, 1980.

- Background Document, Resource Conservation and Recovery Act, Subtitle C- Identification and Listing of Hazardous Waste, §§261.31 and 261.32 - Listing of Hazardous Wastes, November 14, 1980.

- Best demonstrated Available Technology (BDAT) Background Document for Petroleum Refining Treatability Group (K048, K049, K050, K051, K052).

However, a careful review of two of EPA's guidance memoranda do address related issues of heat exchangers as manufacturing process units and when sludges formed within these units would be subject to hazardous waste regulation.

For example, the May 1990 EPA RCRA Hotline Monthly Report did address whether or not a disconnected heat exchanger unit from a petroleum refinery facility would be exempt under 40 CFR 261.4(c) if it was sent offsite for cleaning within 90 days. EPA's response was that the exemption (for hazardous wastes generated within manufacturing process units) was not applicable in this situation because if a manufacturing process unit is disassembled for cleaning offsite there would be a loss of the unit's structural integrity with a potential for hazardous waste releases (see Faxback 13374 a copy of which is attached).

Additionally, an EPA letter dated April 20, 1995 (see Faxback 11903 a copy of which is attached) responded to a request for a determination of when K050 waste is first subject to the listing (e.g. when it is generated). In it's response EPA generally said that hazardous wastes generated in manufacturing process units may remain in the unit for up to 90 days after the unit has been shut down (in accordance with 40 CFR 261.4(c)), and may then be stored for an additional 90 days in a tank in compliance with the requirements of 40 CFR 262.34 without a RCRA storage permit. To remove the hazardous waste from a heat exchanger the bundle must be removed from the unit. EPA therefore implies that when the bundle is removed from the unit, then the 90 day generator accumulation period begins and the waste is subject to the generator storage requirements regardless of when sludge is cleaned from the bundle.

EPA in promulgating the K050 listing and in subsequent Federal Register notices that dealt with petroleum listed wastes, considered it likely that generators would clean the bundles onsite and return them to service. EPA therefore added an exemption to the headworks rule for K050 sludge that is discharged to an onsite oil recovery sewer before primary separation (40 CFR 261.3(a)(2)(iv)(C)).

If a generator instead chooses to dispose the bundle by shipping it offsite, the bundle would be considered debris (as defined in 40 CFR 268.2). In that case, prior to cleaning, the bundle would be considered contaminated with a listed hazardous waste under EPA's Contained-In Policy. Such a bundle would therefore need to managed as listed hazardous waste unless, or until, it were treated (cleaned) by one of the required extraction or destruction technologies specified in 40 CFR 268.45 (40 CFR 261.3(f)(1)).

EPA has not specifically addressed the point of generation of the K050 if the generator's intention is to recycle the bundle as scrap metal. However, following the regulations in 40 CFR 261.2 and 261.3 for determining when a material is a solid and a hazardous waste shows that scrap metal that will be reclaimed (recycled) is a solid waste (40 CFR 261.2) and solid wastes mixed with listed hazardous wastes are themselves hazardous wastes (40 CFR 261.3(a)(2)(iv)). Therefore, once the bundle is removed from the heat exchanger unit with the intent of recycling the bundle, the bundle itself would be listed hazardous waste K050 due to the Mixture Rule unless and until the unit can be sufficiently cleaned.

Although some could argue that the listing description itself implies that only *cleaned sludge* is subject to the listing, this interpretation would lead to the conclusion that if the bundle were never cleaned the sludge would never become a listed hazardous waste. Generators could then simply avoid managing the bundles as hazardous waste by never cleaning them, and simply disposing them as non-hazardous waste. This interpretation is clearly at odds with EPA's original intent and reason for listing the sludge as posing a threat to human health and the environment because of its potential to leach hexavalent chromium if the waste is not properly managed.

This guidance is based upon an interpretation of the federal RCRA regulations. States within our region that are authorized to implement the federal RCRA program, like Hawaii, have the authority to make their own interpretations based upon their own regulations that can be more stringent than EPA's. Additionally, waste determinations for a specific waste at a specific facility are best evaluated on a case by case basis.

I hope that this letter adequately addresses your request. Please feel free to contact Cheryl Nelson of my staff at 415-972-3291 if you have any additional questions.

Sincerely,

Cheryl McNelson

for Rich Vaille
Associate Director
Waste Management Division

RV\CLN\k:\deter\cn78.wpd

Attachments:

RCRA/Superfund/OUST Hotline Monthly Report Question, May 1990, Faxback 13374
EPA Letter to W. J. Sweeney dated April 20, 1995, Faxback 11903

cc with attachments:

Mr. Loren Henning, Manager RCRA Enforcement Office WST-3
Mr. Matt Reed, WST-3
Waste Determination Files (Cheryl Nelson WST-1)